Oral History of Bob O'Rear

Interviewed by **Becky Monk** for the Microsoft Alumni Network

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Preface

The following oral history is the result of a recorded interview with Bob O'Rear as conducted by Becky Monk on August 1, 2024, at Microsoft Studios in Redmond, Washington. This interview is part of the Microsoft Alumni Network's Microsoft Alumni Voices initiative. The goal of this project is to record the institutional history of Microsoft through the recollections of its former employees, so that the information may inform and inspire future generations.

Readers are asked to bear in mind that they are reading a transcript of the spoken word captured through video rather than written prose. The content reflects the recollections of the interviewee. The following transcript was edited by the Microsoft Alumni Network, which holds the copyright to this work.

Interview

Becky Monk: Bob, we're going to start with your name, the years you were at Microsoft, and what you did there.

Bob O'Rear: Well, I'm Bob O'Rear. I started with Microsoft accepting my job at the end of 1977, and I was there through 1993. And I came on board originally to handle the mathematics in the early languages, which was the only thing that Microsoft had at the time, computer languages, BASIC, Fortran, COBOL. And the chips at those times didn't have hardly any mathematics on them, like they do today. And so the mathematics was done in software. And I wrote a lot of the mathematics in our basics in Fortran, and that's how I started with Microsoft.

Becky Monk: Wonderful. Oh my gosh. So I want to go back and start with your journey to Microsoft. So can you tell me where you were born and where you grew up?

Bob O'Rear: I was born in Wellington, Texas. Excuse me. It's in the panhandle of Texas, kind of flat land, very few trees. And born in 1943 so I was much older than the other Microsoft guys when I went to work there. I'm 81 now and middle age starts to catch up with you sooner or later. So I have a few little issues here and there. But Wellington, Texas, my father was a cotton farmer and my mom passed away when I was very young. And then I was raised for the most part by my grandparents. My grandfather was a sharecropper and raised cotton. Of course, split the profits with the landowner.

And then later on we moved to Perryton, Texas, which is in the upper panhandle, a little further up about a hundred miles from Wellington. And he worked for the Texas Highway Department. And we lived there in Perryton. I grew up, there's only one set of schools there. There was three buildings, elementary, junior high, high school. Went all through school there and then off to college in El Paso. And the only reason I went to El Paso was I had an uncle there that was a baker, and he convinced me to come to El Paso and go to college called Texas Western at the time. It had previously been known as the Texas College of Mines and Metallurgy. And so it was very much an engineering school, which I had no idea that was the case.

And I'd had friends a year or two older than me go off to college and say how difficult it was. And some of them were flunking out, this, that and the other. So I was petrified going to college. So my declared major was PE. I played a little tennis and gymnastics in high school and I thought, well, I'll major in PE. That won't be so hard and so I won't fail out. I borrowed the money to go to college and went off to Texas Western.

And I got put in this dormitory and it was just full of engineering students studying mining engineering for the most part. And when I said I was a PE

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major, of course I was an object of a lot of harassing because I had such an easy major and they had it so difficult, and they kept whining about calculus and I had no idea what calculus was. And so finally I'd had enough of that and so I just signed up for calculus and it changed my life. I loved it, absolutely loved it. Thought it was the most miraculous thing I'd ever seen and became a math major.

Becky Monk: So I love that. But how did you just decide, I'm going to take this hard math course, which everyone was complaining about and talking about flunking out of, as the PE major? How did you decide, okay, I'm going to go do this math and end up loving it? And what did you love about it?

Bob O'Rear: I just loved the things about mathematics that it could solve, and I love the fact that it was irrefutable in mathematics as opposed to physics or other sciences. I really loved that and I could go through the steps. I worked awfully hard, didn't come easy, but it was a real joy for me to study mathematics, because it was so revealing, the logic that you could progress down and the kind of conclusions you could make.

Becky Monk: How did you decide to take mathematics and turn it into a degree and then a job? What did you decide you wanted to do with mathematics?

Bob O'Rear: When I studied mathematics, I didn't have a purpose in mind. I just loved the subject and the other things just sort of happened. Serendipity. I loved the mathematics, so I hadn't had enough by the time I finished undergraduate school. So I went to graduate school at the University of Texas in Austin. And it was while I was at the University of Texas in Austin that I found out that they had this ability to attract companies to come and interview and get a job. So I knew I had to have a job after college. And so I signed up to have these interviews and everything.

And by the way, in graduate school I took astrophysics. I thought that was a lot of fun too because it's primarily mathematics when you get beyond the Earth's atmosphere. It was a lot of fun applying the mathematics to astrophysics. I guess I was a natural fit for an aerospace company. So I

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interviewed this company, TRW, Thompson Ramo Wooldridge, made me a really good offer and so myself and a good friend, that I'd gone to graduate school with, went off to Redondo Beach, California in the LA area to work in the aerospace industry.

Becky Monk: And you weren't working on planes, you got to actually be on the forefront of the space race really? Am I getting that right?

Bob O'Rear: Yes, I think you would... That's correct that it was satellites and well, initially I went to work at TRW and it was Air Force projects that we worked on. And it was using mainframe computers, personal computers didn't exist. And in fact, through college I used a mechanical calculator. It wasn't even electronic. It wasn't until I went off to work that there were electronic calculators and mainframe computers, where you program and you punch cards and you feed those cards into a computer and it does calculations.

And so the original project that I worked on for several years was for spy satellites, long before we even admitted that we did spy satellites in the US. And so one of the funny things was you had to have quite a clearance to work on this. And so they investigated me, went to my hometown, interviewed people there and that sort of thing, to make sure you had the right credentials or had no ties to foreign powers I guess. And so I had what was called a top secret special handling clearance, which was a covert clearance at the time. You didn't even advertise that you had a top secret clearance. The whole project was covert, meaning that you couldn't discuss it with anyone outside the project.

Becky Monk: What did you tell people you did?

Bob O'Rear: I just told people that I worked in the aerospace satellites. And we were doing satellites obviously, but I didn't talk about military satellites.

Becky Monk: Got it. So you worked with several branches of the government?

Bob O'Rear: I did. I worked first with the Air Force for several years, and then moved to Houston to work with NASA in the late eighties, leading up to the landing on the moon and everything. I worked on reentry of the command module, the calculations it took. And these were all mainframe solved problems. And we'd feed the data in, the mainframe would do the calculations, and then the calculations would, the result would have to be telemetered up to the command module to execute so it could properly enter the Earth's atmosphere, because there's few issues when you're coming back from the moon or elsewhere when you're entering the atmosphere. First you have to enter it at an angle so the command module doesn't burn up, and then you have to turn the satellite around so that the heat is dissipated evenly, and then guide it into the location so that it can be picked up by the Navy in the ocean.

After my NASA work, I worked for a short while in Huntsville, Alabama with the Army on systems that would protect the US by shooting down intercontinental ballistic missiles. Thank goodness none of these things had to ever be used. And then went to work with the Navy. I lived on Andros Island in the Bahamas, worked with the Navy in perfecting submarine captains. We'd track torpedoes and submarine hunting helicopters, what have you. On Andros Island in the Bahamas, there's a place called AUTEC. Stands for the Atlantic Undersea Test and Evaluation Center. And we tested all the submarines, qualified captains to operate a submarine, played war games out there to test various aspects of the Navy, and did it both for the US Navy and all of NATO at the time.

After that, I moved to Houston and hooked up with a good friend of mine, and we started a little company there called Texametrix, and we married computers, electronics, and mechanical to build machines for a company called Polytop. And they extrude plastic, extrude the cap for say for a hand lotion where you flip up the spout and squeeze out hand lotion. Well, the cap and the spout are manufactured separately, then they have to be put together. Before our project these would be put together with machines, with people watching each cap and spout being put together. And they

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could do, I don't know, maybe 20 a minute or something like that. And we built machines that would put the cap and spout together. It would do a laser scan of the top, we'd analyze that with software, and then eject off bad product. And we went from that 20 or so a minute to like a hundred a minute.

And so Polytop was able to produce a lot more and much better quality control. The big problem was we were pretty good engineers, but we weren't very good financial managers or analysis. And we bid a fixed price on this project and it took us about three times, four times as long to perfect as we anticipated. And so we were almost broke by the time we finished this project. And it got another couple of little projects and we were working on, and I wasn't doing any mathematics or programming for those projects. They were all mechanical. And so I was pretty bored. So I started looking around and that's when I found the Microsoft opportunity.

Becky Monk: Fantastic. Well, I want to get back to that in just a second, but I would be remiss, as a space fangirl, to not go back and talk about the Moon landing, because you were in Houston in the control room, right?

Bob O'Rear: My program was there. I wasn't physically there. I was on call to go in.

Becky Monk: Talk me through that? Tell me what that was like?

Bob O'Rear: Well, oh it was-

Becky Monk: Everybody else was watching Walter Cronkite, you were there. Tell me about it?

Bob O'Rear: Well, let me lead up to that. At TRW, we had all these different space flights and there was always, and of course first they went up and then they orbited the earth. Then we orbited the Moon without landing, came back, and then the command module would of course land and they'd pick up the astronauts and everything. And we called that splashdown. And we had these massive splashdown parties that were a lot of fun in

Houston after every landing, because it was a sigh of relief to have the astronauts back safely. And then on the Moon landing, it was so tense. Everybody was checking their logic. I was going through logic like crazy for weeks, and even while the flight was taking place, the original lunar landing flight, I am in Houston, I'm not far from mission control. Our program is going to be running, and so it's running. I'm checking logic and, as tense as I can be, still couldn't find any issues. And once we had the landing, it was just this massive sigh of relief that everything went okay and we got the astronauts back safely.

Becky Monk: Incredible. Did you know when you started that program and started working with NASA, did you know that it was going to be as big and important work that it was, or was it just another project that you were working on?

Bob O'Rear: Well, at the time I knew it was going to be big, and I of course worried about it, because I didn't work on the other aspects of the lunar flight, just that one aspect of reentry. But I knew it was big, it was special, but in retrospect, it was more special than I'd realized at the time, I guess. I guess I'd put it that way.

Becky Monk: All right. So you were about to go work at a little company in Albuquerque, New Mexico called Microsoft. What made you think, after working with the military on massive projects, after working with NASA on huge projects, after starting your own company? I know you said you were bored, but what made Microsoft an exciting idea for you?

Bob O'Rear: What made Microsoft an exciting idea for me was it was working on computer languages, which I'd always been fascinated with but had never gotten to work with. Creating the computer language. Of course, I'd used computer language to solve problems, like Fortran, and I was fascinated at the prospect of actually helping create the language and do it on a microcomputer. Microcomputers were just getting going. When we solved the Polytop project, that was with an LSI-11, which was a DEC

microcomputer. And it was fun having a microcomputer, a computer that you could touch and use to program on, and get immediate feedback. So as opposed to mainframes where you've got to sit in your office, you write out your program, you go punch some cards, and you give this to a computer operator, who goes and puts those cards into the mainframe to compile your program and execute it and come back. You're there getting immediate feedback and I love that. And I really wanted to work on languages and Microsoft was the only opportunity I knew of that I could do that.

Becky Monk: So how did you get the job? You flew down to Albuquerque?

Bob O'Rear: I did. Well, first off, this friend of mine, a real good friend, he first saw the job and went out for an interview. And we saw it in this little computer rag called Software Age. They had a classified ad looking for programmers. I can't remember exactly what it said, but the description seemed to fit me. But any rate, he went out and interviewed for it first, thought it was interesting, but he wasn't nearly as interested in doing languages as I was, and he didn't have quite the mathematical background I had. And so he decided to stay with his job in Houston, but told me about it. And so I looked into it, made the connection, and they flew me out to Albuquerque from Houston. And so I interviewed with Bill [Gates] and Paul [Allen]and a couple other people there were at Microsoft, and liked what I heard. Of course I was staggered by how young Bill was and how young he looked, but it didn't take long into the conversation to realize his technical depth and brilliance and Paul's as well.

Becky Monk: I love this. Okay, so you flew in. Where did you interview, and talk about meeting those two that first time?

Bob O'Rear: Well, I first went to the office, but then it was a little office. I don't know, I'm guessing it was 2000 square feet probably at the most. And we just went to, I don't know, some local restaurant. Maybe it was a pizza shop. I

don't really remember right now. It's been a few years. And we just chatted over our lunch.

Becky Monk: So they were much younger. You had already had multiple careers. What impressed you that made you want to go work for these kids and work with the languages?

Bob O'Rear: Well, the thing that impressed me most about wanting to work with them was first off, how really smart. It didn't take long. We were asking each other technical questions and I'm giving technical answers, and they're giving me feedback on my answers. And they had a lot of insight into what I had done just from talking with me. And then as they described things they were doing, I realized just how brilliant they both were. And I really wanted to do language work. It's the work that attracted me to Microsoft, something I had not done, something I really wanted to do.

Becky Monk: So you started in 1977?

Bob O'Rear: I think I accepted my job at the end of 1977 and then started either right at the end of '77 or right at the beginning of '78.

Becky Monk: So, you were employee number?

Bob O'Rear: Seven.

Becky Monk: Got it. Seven.

Bob O'Rear: Well, there's a little bit of controversy there. Andrea Lewis and I always had a little bit of banter about that. She was going to school there and she would do a little bit of part-time work with Microsoft. And she was a writer, and so I don't count her as number seven. So I claimed to be seven, and then she came on full board later on about a year later or something like that. So it is a real fun controversy.

Becky Monk: Yes. All right. So you were in Albuquerque, you were one of the rare few who got to work out of those 2,000 square feet in Albuquerque. What was

that like? What was the building like? Was it one office you were all in? What was the atmosphere like?

Bob O'Rear: Well, it was, yeah, it was a office building. We were up on the eighth floor. I had my own office and sort of the routine, the younger guys, I was the old man of the group, the younger guys, they liked to come in around, I don't know, 10 o'clock in the morning and work till maybe midnight or something like that, or maybe 10 in the evening, something like that. Myself, I didn't like those hours very much. And so I would come in really early, like three or four in the morning, and work until mid-afternoon just so I would have a lot of peace and quiet all by myself to solve problems. And then we'd go have a lot of fun on weekends from time to time and took water ski trips. And in Albuquerque, you can ski right there. You can take a tram, there's a mountain right there, and you can ski on the other side. So did that when I wasn't working too hard.

Becky Monk: What were those days like? How long were those days?

Bob O'Rear: Well, those days were pretty long because from day one, we were always behind on a project. Bill was our sales guy. And so he'd go out and he'd get contracts with various hardware vendors to put our languages on their hardware. And of course he'd made promises that were very hard to keep. And it's always hard to project just how long a project will take because you're working with new computers, and many times the issues weren't with the software, they'd be with the hardware. And you'd have to help the hardware guys fix whatever problems there were with the hardware, as well as the problems you had with your software. And sometimes it was hard to tell the difference between is that a software, is that a hardware problem? And you'd have to work to solve those.

Becky Monk: When did you start working with the IBM?

Bob O'Rear: Well, we moved the whole company to Bellevue in January '79. And well, the whole company moved mainly because the industry was starting to change. It was growing up, a lot more microcomputers were being sold.

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The company that we were closest to in Albuquerque, MITS, got bought up by a company in the LA area called Pertec. And so we didn't have our main customer right there anymore. The reason, well, maybe back up just a little bit. The reason it was in Albuquerque to start with is that's where the first microcomputer was built. And you couldn't do anything over the wire in those days. And so they needed to be co-located with the hardware company to get languages up and running.

Excuse me a second. And so Bill and Paul went from the Boston area, Bill at Harvard and Paul working for Honeywell, and moved to Albuquerque to bring up the languages on the MiTS computer. So sometime in, I think, '78, MITS got bought up, moved out to California, more of a Silicon Valley area. And so most of our customers were elsewhere. Almost all of them are elsewhere, either in Silicon Valley, or LA, or over on the East Coast somewhere, or Europe. And so Paul especially wanted to move back to Seattle area. I'm not sure Bill really cared whether, he was just working all the time.

And so I think Bill's mom convinced Bill to come back to the Seattle area. And so we moved in January '79 and continued bringing up languages for various hardware vendors. And started the Xenix project, the operating system for multi-user operating system. Excuse me. And in 1980, IBM approached us and wanted to build a microcomputer, and hired us as consultants to start with. And then because we had the languages, we were a little better known than just about any of the other companies that were working on microcomputers at the time. And so we recommended that they use CPM operating system written by Digital Research. And so some of the IBM people, excuse me, flew out to meet with Digital Research. And it was a disastrous meeting for IBM and Digital Research because they got nowhere with Digital Research, and then came back and sort of insisted that we write the operating system.

And so we scrambled around, found the foundation for an operating system from Seattle Computer Project or Seattle Computers, and a guy

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named Tim Patterson had written that foundation and we knew them. We had to help bring up our languages on their computer. And so we said, well, okay. And we took that foundation. Well, first Tim stayed with Seattle Computer Project to begin with. I became the project leader of bringing up a operating system on the new IBM PC. And so I had to pull together and write all the other aspects of the operating system.

He had written a file system, which was a big part of the operating system, but not everything. There was a lot of other pieces that need to be put in place. And so I wrote those and interfaced with IBM as they were developing the original IBM PC, and started bringing it up. And then we were lucky enough to be able to hire Tim Patterson to come over and help me later in the project. And so from about Thanksgiving 1980 until we had it up and running and on the IBM PC by mid-August of '81. So it was a project, probably the most consuming project I ever worked on as a technical guy. If I was awake in those days, I was working on the project pretty much, or thinking about it. It was a matter of making the hardware work and making the software work.

Becky Monk: Okay, I've got to ask that. And this was what became MS-DOS?

Bob O'Rear: Yes.

Becky Monk: Okay. So you weren't a language guy, but you quickly became a language guy. How did you take on the responsibility of then building an operating system?

Bob O'Rear: Well, back on the Polytop project, I needed an operating system to manage the software to analyze the bottle caps and run on that microcomputer. So I had written a small operating system at that point, so I had a little bit of operating system expertise coming into the project.

Becky Monk: Okay. So it wasn't completely foreign?

Bob O'Rear: It wasn't completely foreign.

Becky Monk: So as you were doing this and working those super long days, and eat and sleep and MS-DOS, did you have an idea of what that would do for the computer industry?

Bob O'Rear: Well, I grew up in the mainframe industry, and when you grow up in the mainframe industry or mainframe times rather, you have a huge reverence for IBM. They were the thousand-pound gorilla during my early years. And so I knew how important IBM was, and what they could do, and what influence they would have on the industry. Because IBM pretty much controlled the mainframe industry in computing for many, many years. And so I had a huge reverence for IBM and thinking this could really go somewhere.

Becky Monk: How did that relationship propel Microsoft's trajectory?

Bob O'Rear: Well, having the operating system and the languages on the original IBM PC, in my mind, was instrumental in propelling Microsoft to its place in computing, and in the personal computing industry. Hardware vendors then wanted to have similar programs or computers to IBM, and so to do that they would need our software, our operating system, our languages to be able to compete against IBM. And so it made it much easier to sell any kind of Microsoft product, being the operating system on the personal PC.

Becky Monk: What was the biggest challenge for you in building, and getting this to run, and getting this out the door?

Bob O'Rear: Probably the biggest challenge in getting this operating system running was fixing problems when you couldn't figure out whether they were software or hardware. And it was quite a challenge because the PC that I had to work with wasn't a finished product. It was a wire wrapped product where the execution was all in a wire wrapped situation. And that's meaning it's not a chip, it's just logic on a board that's wire wrapped. And they insisted on a lot of security. And we'd be in this little room about the size of this room. No, smaller than this room. And these computers, I had

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two or three computers in there helping me, and they would generate a lot of heat. And so the wire wrapped PC, the logic wouldn't always execute the same even though you had the same instruction, because the wires would release and the logic would transition from one thing to another. And so I'd have to cool down the room. I'd have to wait for it to be cool enough to run again and then execute the program and try to find the error.

Becky Monk: Did IBM provide you with a hardware expert to be there with you, or were you doing both?

Bob O'Rear: In those days I didn't have an IBM expert with me there. No, I had to do both. I had soldering irons, I had some electronics to try to analyze things, and I had a telephone. And I could call and get almost immediate response from IBM if I needed their help. And a few times I had to have them fly up and they were out of Boca Raton, Florida. Fly up and help me solve problems.

Becky Monk: Yeah, so you were kind of the sole person working on this. When did you end up getting additional help?

Bob O'Rear: Well, like I say, I started the project around Thanksgiving of 1980, and I'm guessing that Tim Patterson probably came on board about April or May of 1981. I'm not sure exactly when he came in and would help me.

Becky Monk: When it was time to do the next version of MS-DOS, were you instrumental in that as well?

Bob O'Rear: I was not. Mark Zbikowski came in and took over MS-DOS, and made it into a real operating system. It was very fundamental when I finished. And he turned it into a much more robust operating system. The original MS-DOS 1 was sort of my swan song as a technical guy at Microsoft.

Becky Monk: And you then went on to help take Microsoft around the world?

Bob O'Rear: Yes, I transitioned from all technical guy to a person to help establish a subsidiary, and work with our customers overseas.

Becky Monk: So you went, the first place they sent you that you went was the UK, is that right?

Bob O'Rear: Yes. First place I went was the UK. We located the first office in a little town called Berkhamsted in England, just north of London. Well, not just north, about, I don't know, must be 50 miles north of London. And so we rented some office space there while we were getting started. And so I started working with customers in England and all over Europe. I mean, we were going to be the place that serviced all of Europe. And mainly OEMs was what I would work with, the hardware manufacturers, to sell them MS-DOS and our languages, or help them bring it up, give them some advice to help bring them up. Obviously couldn't go and work with them, but I could point them in the right direction.

Becky Monk: So to set up this first subsidiary, this first sales office, really, you were the person on the ground executing leases, and figuring out how to do contracts, and writing and executing those. How did the kid from Texas, who'd never been on a plane, now across to Europe, land with your feet on the ground in the UK, and take off running and start doing all the business operations?

Bob O'Rear: Well, I got a little bit of business experience at Texametrics when we were having so much difficulty and I did help do the contract with Polytop. And so I knew a little bit about the legal side. And then right after MS-DOS, I briefly worked with our OEM contract in the OEMs selling our products to OEMs in the US. So I knew that contract pretty well. And so I went to Europe. The things I had learned there, I knew because of directions from the key people at Microsoft at the time. I knew we had to get established legally. So we went and engaged lawyers. We needed accountants to help with the accounting. We needed headhunters to help find us people. And so we helped engage all those kinds of people to help us get started.

Brokers to help us find office space. So it was an education for me. It was a learning. I was on a steep learning curve I guess you'd say.

Becky Monk: But what you ended up doing there became a model for what Scott Oki would then say, we're going everywhere. So can you talk a little bit about how it switched from being a one-time gig for you, to being an international plan?

Bob O'Rear: Well, it just happened one step at a time. I mean, we're establishing the subsidiary in England, Scott's over in the US and in Japan, helping start a subsidiary in Japan. And he had a lot more international experience than me and more travel and more business background, a lot less technical background. And so Scott figured out that one office just outside London's not going to work well to service all of Europe. We need Germans in Germany, we needed the French in France and so on, so forth. And so then he convinced Bill that this is what we should do. And then Scott of course became vice president of international.

And so we were good friends even before I went to Europe. When Scott came on board to work on the Japanese subsidiary and everything, he and I became good friends. We played racquetball, we did things together. And so he knew me pretty well. And so he enlisted me to help him start the subsidiaries throughout Europe. And so I'd go interview the different people that we needed, whether it was technical people or business people or management people. And by then I'd become pretty good at interviewing and understanding and knowing what kind of guys we needed, or what kind of people we needed for those subsidiaries, some technical, some sales, what have you. And so I could ask sort of the right questions I think.

Becky Monk: And so you started in England and then what was next? Was it Germany?

Bob O'Rear: France and Germany we sort of did in parallel. We were building both subsidiaries kind of at the same time. And so we had to find technical guys and we had to find management guys and business guys for those

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additional subsidiaries, as well as expanding the English subsidiary. We needed more people there to help us with the sales and marketing and technical support in particular.

Becky Monk: All told, when you were done with your part of the expansion, you had been zipping all around the globe starting these?

Bob O'Rear: Well, at that point I was just working in Europe. And then I came back to the US and then started going all around the world. Yeah, I was in England for just under two years and then came back. And of course Microsoft had expanded greatly in the US by the time I came back, because the PC was such an amazing success. And we'd hired a lot more people and I had a lot more people to meet and get to be friends and colleagues with. And then I took on a job of starting subsidiaries and distribution with sort of the non-Europe, non-Japan areas. I helped start the subsidiary in Australia and Canada, several in Latin America and South Africa. Number of places.

Becky Monk: Do you know off the top of your head how many you opened by the time you were done with that?

Bob O'Rear: I don't. I'd have to sit down and I don't know how many subsidiaries I opened at this point. It was a number. It got to be, it's never routine because you're always looking for the right people. And you hate to compromise until you find that right person. And so I think that became my new expertise, was finding really good people for Microsoft.

Becky Monk: How did you find those people in those areas, when you didn't necessarily know the culture and it was definitely different from Germany to France to Sweden? So what were the things that you ended up seeing in those people, those hires, that they're going to be the ones that can run this subsidiary?

Bob O'Rear: Well, in looking for the people, I listened a lot to the headhunters that we'd find. And then as you're interviewing people and just talking with them, you kind of get a sense of where they fit in the microcomputer

industry, because they'll either know a lot about it or not. And how technically adept they are. At that point in time we did need technically capable people. You couldn't just be this manager that had never done anything technical, or at least that's what we thought anyway. And so even if you were a head of the subsidiary, you needed some technical expertise and understanding of what it took to put software together, and who might need it. And so it didn't take too long to figure out if they were a good fit for Microsoft.

Becky Monk: Do you have a favorite subsidiary that you opened, or a favorite story about opening a subsidiary that you could share?

Bob O'Rear: Tough question. Let's see. Well, I guess I thoroughly enjoyed starting up the Australian subsidiary because, well, it was a long ways away. I'd never been to Australia. It was kind of fun learning about Australia and then what the issues were with starting a subsidiary in Australia. We bought up a distributor, a Microsoft distributor in Australia, and hired the manager from that distributor. Linda Graham started our first Australian subsidiary. And they were hardworking. I went over and spent about a month in Australia helping them get started. It was some good times, hard times, a lot of work, but a lot of fun with the Australians.

Becky Monk: What were the biggest challenges of getting Microsoft set up in the different countries?

Bob O'Rear: Well, big challenges would be like in finding a good location that works, where we can have our staff with a decent office where we can bring customers in. Getting those leases signed and not having to buy a property or anything. Particularly difficult in England at that time, finding the right place. In Australia much easier. It varied country to country. And the labor issues surrounding hiring people, what it would take, whether it needed to be furnished a car, how much vacation time, learning all of those legal aspects of employment in the different countries was always a challenge and coping with those.

Becky Monk: Right. You couldn't just pick up what you were doing in America and move it to England. You couldn't pick up what we were doing in England and move it to France.

Bob O'Rear: Right. That's correct, because the laws were different. The requirements were different for hiring people, firing people, setting up the subsidiary, how it would be owned legally and that sort of thing.

Becky Monk: Fascinating. I want to talk a little bit about Paul if I can, because you were one of the few people that actually got to work side by side with Paul.

Bob O'Rear: I was, I'm very lucky in that regard.

Becky Monk: Tell me a little bit about him as a person and what you worked on, and what it was like working with him?

Bob O'Rear: Well, Paul and I worked together right from the very beginning because he is of course one of the original authors of the Microsoft BASIC. And he was always around, whereas Bill was doing a lot of travel. I worked with Bill as well, but Paul was like always there. If I'd have a difficult problem and I am trying to solve it, Paul might be one of the first I would call to come in and help me and let me tell him the problem. If I'd told him the problem he almost always had enough insight to tell me, or work with me to find what the issue was. And he was fun. Paul and I did things afterwards, been to his apartment many times and listened to him play the guitar. He was a wonderful guitar player. We went on camping trips around the Albuquerque area. I loved working with Paul. He was a wonderful guy.

Becky Monk: What was the atmosphere? What was the culture? I know you've talked a little bit about it being a hardworking place, and you worked different hours than the rest of the crew, but what was just being in early Microsoft like? It had to have been way different than working for the military.

Bob O'Rear: Oh, yes. Microsoft was very much different than working with the military. The bureaucracy wasn't there. I mean, you were there to solve a problem

and that was the main thing to do, and you're there with a stopwatch. You needed to have this thing working because there's other people depending on the work that you're doing. The culture was really hard work, but the love of the technical area. I mean, even as crazy as it seems, when we weren't working really hard and we were going out having fun, a lot of our talk was all technical. People loved the technical area, and they talk about things they did or things they discovered or this, that and the other. So a lot of transmission of knowledge between us. And I think it helped us all. We're having a lot of fun, but we'd end up talking technical into the night.

Becky Monk: Did you feel like you were on the cutting edge of things or was this just, we're just working through problems?

Bob O'Rear: Well, we knew we were on the cutting edge because new hardware was coming out constantly. Whether it was the video hardware, whether it was additional memory or more powerful chip, there was just constant things coming out of the industry at that point, that were real changemakers, that needed to be taken advantage of, and that required more software. So we knew, well, we knew it was a lot of fun more than anything else, I guess. We knew it was a lot of fun taking advantage of these new developments in the hardware industry.

Becky Monk: Yeah, I mean, I can't even imagine. It must be what the folks today, the innovation then must be what the folks today are thinking about AI.

Bob O'Rear: It must be. I wish I understood AI a lot more, but it must be sort of like, I would think it would be very similar to what you can do, what a revolution in the industry it's making.

Becky Monk: Is there something that you are most proud of with your time at Microsoft?

Bob O'Rear: I think I'm most proud, well, probably two things, but most proud maybe of the people that I was able to discover and hire that help expand

Microsoft. And probably secondly, just bringing up the DOS on the original PC.

Becky Monk: Who were some of those people?

Bob O'Rear: Oh, goodness. Well, Bernard Byrne, Joachim Kempin, Gregorio Diaz, Mauro Muratorio Not. You caught me off guard or I could probably name a lot more.

Becky Monk: But no, that's fantastic. If you could go back and talk to the boy that was growing up on the cotton farm, and give him advice about going to work for Microsoft now, what would you tell him?

Bob O'Rear: Oh my goodness. Giving the boy that grew up on the cotton farm advice about working for Microsoft. Well, you're going to experience a lot of things you've never seen before. Be sure to enjoy them as you go.

Becky Monk: I love that. I love that. What is the legacy of Microsoft? What do you think the legacy of Microsoft is today?

Bob O'Rear: I'm not sure exactly how to answer that, but I mean I think we were a foundation, a pillar in bringing technology and a lot of solutions for many, many problems to the world.

Becky Monk: A lot of people have mentioned this, and now I want to ask you if this was a thing when you were there. They talk about the mission statement, the computer on every desk in every home. Was that even a kernel in Bill and Paul's eye at that time when you were there? Was that a mission statement yet or did that come along later?

Bob O'Rear: I think that that actual statement came along about... It came on early. I'm going to guess '80, '81 when that mission statement came along. And I'm not sure who even came up with that, whether it was Bill or Paul or someone else.

Becky Monk: Did it seem doable or was it just a pie in the sky kind of thing?

Bob O'Rear: That did seem very doable because I used a microcomputer and it really opens up your eyes, what you can do with it. Managing your finances was probably one of the first things. Being able to pay bills through the computer, so many different things you could do. And having it on your desk to manage those things was so miraculous to me, because I'd grown up in the mainframe era when you certainly couldn't put one on your desk, or in your house, or in three or four houses around you.

Becky Monk: Is there anything else that you want us to talk about, that you really want to make sure we touch on?

Bob O'Rear: I have such reverence for Bill and Paul, of the skills they had to make Microsoft what it was. I mean, those two were two unbelievable human beings.

Becky Monk: When we talk to a lot of people, especially the folks who were around later in the Microsoft life, we talk about kind of the social impact, the philanthropic impact of the company. Was that there when you started? Did they already do the United Way thing or was that not until later?

Bob O'Rear: That brings up a wonderful memory. Bill's mom was really big in United Way. And the CEO, I can't recall his name right now, of IBM was also big in United Way. They had a chat and Bill's mom told the CEO of IBM about her son, and that's how that contact originated. It came from the top to contact Bill in Albuquerque. Or no, I guess we were in Bellevue at the time. About the languages for the PC. I guess I'd forgotten about that.

Becky Monk: So wait, you're saying that the philanthropy piece really-

Bob O'Rear: Connected.

Becky Monk: ... Connected the big contract?

Bob O'Rear: Absolutely. I'd kind of forgotten that point. The other person that we haven't talked about, who was so instrumental in making Microsoft, is

Steve Ballmer. I mean if it had just been Bill and Paul, it would never have expanded as quickly and thoroughly as it did because of Steve Ballmer.

Becky Monk: When in relation to you being there, when did Steve join the company?

Bob O'Rear: Steve joined, I believe in either late '79 or early '80, something along there. And he was instrumental in the IBM project. It was when we flew to Boca Raton to present our proposal to IBM, it was Bill and Steve and myself.

Becky Monk: So the three of you were in the room for that presentation?

Bob O'Rear: Yes.

Becky Monk: Okay. So who did what? Talk me through that?

Bob O'Rear: Well, Bill and Steve of course handled the contract negotiation parts. I was just the technical guy there explaining how we would pull together the operating system and the languages, and put those on the microcomputer.

Becky Monk: Was there a lot of back and forth? Was it an easy conversation?

Bob O'Rear: Well, I think the path had been greased by certain IBM guys, so it was a fairly easy conversation, I guess you'd say. But I mean there was probably, I don't know, 14 IBM guys talking to the three of us. And the funny thing that this reminds me of, we finished our proposal the night… Well, we finished our proposal, pulled it off of the printer, ran to the airport. I drove there. I rode with Bill, I think in his Porsche, and I don't know if we ever got under the speed limit. I know we were way over it at times. And jumped on the plane, flew overnight into Miami. We arrived and we discovered that Bill didn't have a tie and we thought, oh gosh, this is IBM. You got to have a tie to go in to see IBM. And our appointment I think was at probably at 10 o'clock or 10:30 or something like that.

And so on our drive from Miami up to Boca, the argument was, do we stop and get a tie for Bill or do we go in with no tie? And finally getting the tie

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won. So we drive into this, we know we need to be at the meeting and we're going to be late if we get the tie. So we drive up to this shopping center, we go up to the door and it's not quite open yet. And so we waited for the person to unlock the door of the shopping center. We run in, and we quickly select a tie for Bill, and we help him get it on. And then we go over to our meeting at IBM.

Becky Monk: That deal could have hinged on that tie. Oh my gosh. You have so many amazing stories. I know we could stay here all day. Bob, thank you.

Bob O'Rear: Oh, you're welcome.